

In the Claims

1. (Currently amended) An elasticity measuring device for being inserted into a canal part of a human body and for measuring elasticity of the inner side of the canal part of the human body, said device comprising:

a probe base for being inserted into the canal part of the human body;

~~at least one~~ a probe arranged around said probe base, which is located near the inner side of the canal part of the human body when the device is inserted into the canal part and is driven to press onto and return from the biological tissue;

a resilient arm member having one end and ~~the~~ an other end, said one end supporting said ~~at least one~~ probe thereon and said ~~the~~ other end being firmly fixed to said probe base, said resilient arm member comprising a plurality of spring members, said probe comprising a plurality of probes being symmetrically arranged around said probe base through corresponding spring members;

a stress detection sensor provided on ~~said probe~~ at least one of the plurality of probes, for detecting hysteresis of the stress applied to the biological tissue based on the repulsion from the biological tissue when said at least one of the plurality of probes ~~probe~~ is driven to press onto and return from the biological tissue; and

a deviation detection sensor for detecting the hysteresis of changes in distance of said stress detection sensor with respect to said probe base;₁

wherein the elasticity of the biological tissue is measured based on the stress and deviation magnitude characteristics when the at least one of the plurality of probes ~~probe~~ is driven to press onto and return from the biological tissue.

Claim 2 (Canceled).

3. (Currently amended) An elasticity measuring device for biological tissue according to claim 1 ~~2~~, in which said deviation detection sensor comprises a pair of light emitting element and light receiving element, said light emitting element being secured on a surface of said probe base and said light receiving element being secured on ~~said spring member~~ at least one of the plurality of the spring members so as to oppose to each other.

4. (Previously presented) An elasticity measuring device for biological tissue according to claim 1, in which said stress detection sensor comprises a distortion gauge.

Claims 5-7 (Canceled).

8. (Previously presented) The device of claim 1 wherein the probe base comprises an elongated bar.

9. (Currently amended) The device of claim 1 wherein the probe base comprises an outer surface, and wherein the ~~at least one probe~~ plurality of the probes is configured to move substantially perpendicularly to the outer surface of the probe base.

10. (Currently amended) The device of claim 1 wherein each of the plurality of the springs members ~~resilient arm member~~ comprises a plate spring.

11. (Currently amended) The device of claim 1 further comprising a sleeve, wherein the sleeve and the probe base are configured to move relative each other in a longitudinally axial direction, and wherein the relative movement of the sleeve and the probe base moves the ~~at least one probe~~ plurality of the probes in substantially a perpendicular direction relative the longitudinally axial direction.

12. (Currently amended) The device of claim 1 wherein the probe base comprises an elongated structure that extends along a longitudinal axis, and wherein the ~~at least one probe~~ plurality of the probes is configured to move substantially perpendicularly to the longitudinal axis.

13. (Previously presented) The device of claim 1 wherein the probe base comprises a square cross section.

14. (Currently amended) The device of claim 1 wherein the ~~at least one probe~~ plurality of the probes is in a fixed relation relative the plurality of the springs members of the resilient arm member.

15. (Currently amended) The device of claim 1 wherein the ~~at least one probe~~ plurality of the probes is affixed to respective ones of the plurality of the springs members of the resilient arm member.

16. (Currently amended) The device of claim 1 wherein the stress detection sensor is affixed to at least one of the plurality of the spring members of the resilient arm member.

17. (Currently amended) The device of claim 1 wherein the deviation detection sensor is affixed to at least one of the plurality of the spring members of the resilient arm member.

Claim 18-19 (Canceled).

20. (Currently amended) The device of claim 1 wherein an entirety of the structure of each of the plurality of the spring members of the resilient arm member comprises a substantially solid structure.

21. (Currently amended) The device of claim 1 wherein an entirety of the structure of each of the plurality of the spring members of the resilient arm member comprises a single structure, and the single structure comprising resiliency.

22. (New) An elasticity measuring device for being inserted into a canal part of a human body and for measuring elasticity of the inner side of the canal part of the human body, said device comprising:

a probe base for being inserted into the canal part of the human body;

at least one probe arranged around said probe base, which is located near the inner side of the canal part of the human body when the device is inserted into the canal part and is driven to press onto and return from the biological tissue;

a resilient arm member having one end and an other end, said one end supporting said at least one probe thereon and said other end being firmly fixed to said probe base;

a stress detection sensor provided on said probe, for detecting hysteresis of the stress applied to the biological tissue based on the repulsion from the biological tissue when said probe is driven to press onto and return from the biological tissue;

a deviation detection sensor for detecting the hysteresis of changes in distance of said stress detection sensor with respect to said probe base;

wherein the elasticity of the biological tissue is measured based on the stress and deviation magnitude characteristics when the probe is driven to press onto and return from the biological tissue; and

wherein the probe base comprises an elongated structure that extends along a longitudinal axis, and wherein the at least one probe is configured to move substantially perpendicularly to the longitudinal axis.

23. (New) An elasticity measuring device for being inserted into a canal part of a human body and for measuring elasticity of the inner side of the canal part of the human body, said device comprising:

a probe base for being inserted into the canal part of the human body;

at least one probe arranged around said probe base, which is located near the inner side of the canal part of the human body when the device is inserted into the canal part and is driven to press onto and return from the biological tissue;

a resilient arm member having one end and an other end, said one end supporting said at least one probe thereon and said other end being firmly fixed to said probe base;

a stress detection sensor provided on said probe, for detecting hysteresis of the stress applied to the biological tissue based on the repulsion from the biological tissue when said probe is driven to press onto and return from the biological tissue;

a deviation detection sensor for detecting the hysteresis of changes in distance of said stress detection sensor with respect to said probe base;

wherein the elasticity of the biological tissue is measured based on the stress and deviation magnitude characteristics when the probe is driven to press onto and return from the biological tissue; and

wherein the deviation detection sensor is affixed to the resilient arm member.